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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,682

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Uwe Schnitzler

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EXAMINER

LEE, BENJAMIN HYOUNGSOL

ART UNIT

PAPER NUMBER

3739

MAIL DATE

DELIVERY MODE

09/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,682	Applicant(s) SCHNITZLER, UWE	
	Examiner BENJAMIN LEE	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/18/09 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-5, 7 and 8-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (US Pat. No. 5,320,621) in view of Farin et al. (US Pat. No. 5,720,745).

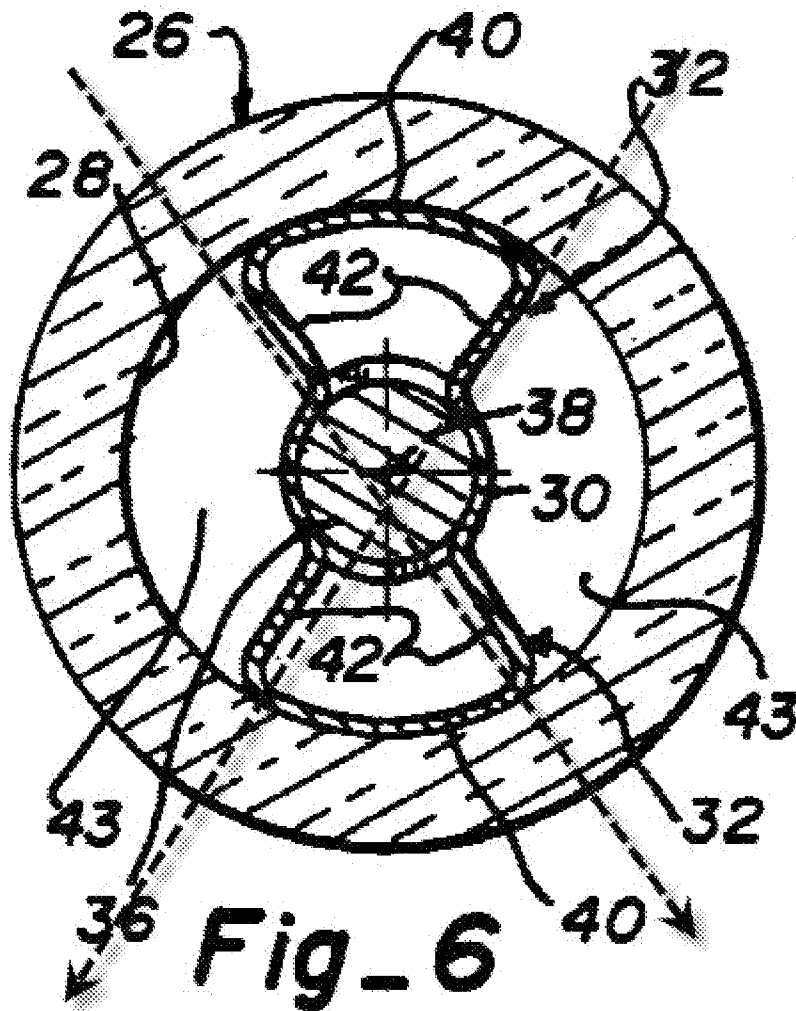
Regarding claim 1, Gordon et al. teaches an instrument for plasma coagulation in Figs. 2, 5 and 6 comprising a tubular probe body (26) with a tube wall defining a lumen (43) through which an inert gas is conducted through the probe body (col. 4, lines

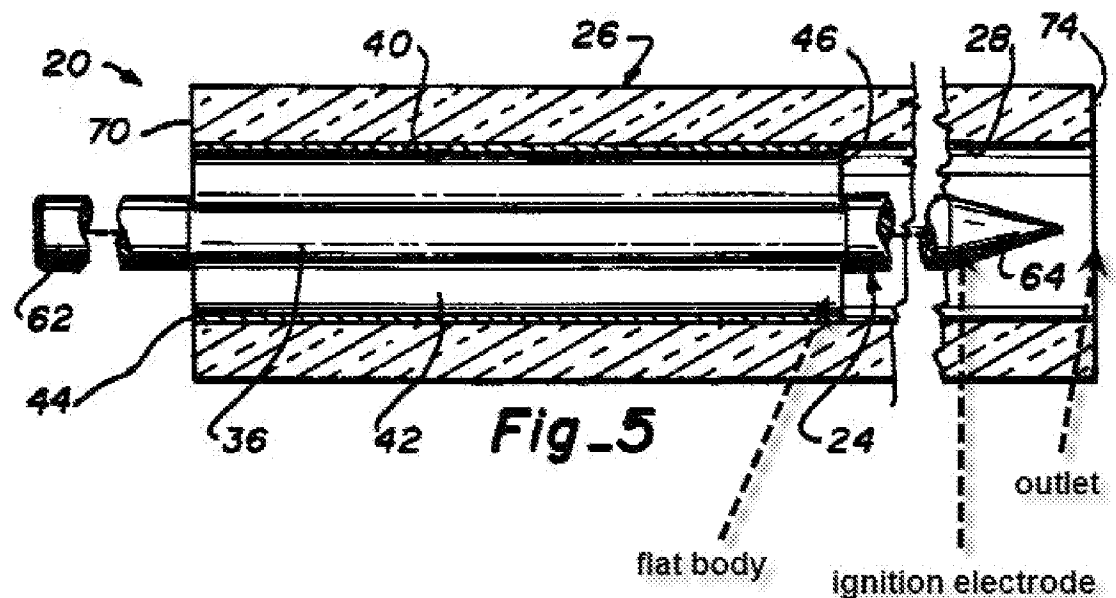
Art Unit: 3739

52-57) an ignition electrode (portion of 24 to within and to the right (distal) of fixing device 22) located within the lumen in the region of an outlet defined by the probe body, a current conductor (portion of 24 to the left (proximal) of fixing device 22) adapted to supply a coagulation current to the ignition electrode, and a fixing device (22) fixing the ignition electrode in a predetermined position within the probe body, and comprising a flat body (legs 42, Fig. 6) with longitudinal edges (between 42 and 40) by means of which the flat body is attached to the tube wall such that the flat body extends substantially diametrically across the lumen (since legs 42 extend across the lumen from opposite sides in a partial manner, as seen in Fig. 6 below), and to which the ignition electrode is attached (col. 4, lines 22-25 and 48-52). Furthermore, the ignition electrode extends further into the lumen in a direction of the outlet than the flat body of the fixing device as seen in Fig. 5 of Gordon (shown above). Regarding claims 1 and 7, it is noted that Gordon et al. does not explicitly disclose a high-temperature-resistant material within the lumen associated with the flat body. Farin et al. teaches a plasma coagulation device in Fig. 21 with a tubule (20) made of a high-temperature-resistant material (col. 6, lines 43-46) inserted into the lumen in the region of the outlet and wherein conductor (8) is disposed at the proximal (right) end of the tubule that faces away from the outlet (41), wherein the conductor comprises a flat edge (left edge) and abuts the tubule by means of sections of the flat edge. The tubule is secured against the conductor but is removable for sterilization to enable repeated use of the device (col. 6, lines 47-48). Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Gordon et al. with the

Art Unit: 3739

removable tubule of Farin et al. such that the tubule is removably secured against the flat body in order to enable sterilization of the device for repeated use.





Regarding claim 2 and 3, Gordon teaches the current conductor integrally connected to the ignition electrode by means of the flat body (Figs. 2 and 5)

Regarding claims 4 and 5, Gordon discloses the structural elements of the instrument set forth in claims 4 and 5: the ignition electrode is attached to the flat body. Although Gordon discloses a physical process used for attaching the electrode in Figs. 8-10, Gordon does not disclose the use of a welded attachment. The procedure for attaching the electrode/conductor to the body in claims 4 and 5 is being treated as a product by process limitation; that is, that the electrode/conductor is attached to the body by point-wise resistance welding. As set forth in MPEP 2113, product by process claims are NOT limited to the manipulations of the recited steps, only to the structure implied by the steps. Thus, even though Gordon does not disclose the use of welding,

Art Unit: 3739

the final product of Gordon would be the same or similar as that claimed; especially since both applicant's product and the prior art product are electrodes attached to fixing devices used in the delivery of plasma to treat tissue.

Regarding claim 8, Gordon teaches a flat body comprising a flat edge (Fig. 6) that defines a concave cutout (between legs 42) which faces toward the outlet.

Regarding claim 9, the grounds of rejection in regards to claim 1 are incorporated herein, thus addressing each of the limitations of claim 9.

4. **Claims 4 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (US Pat. No. 5,320,621) in view of Farin et al. (US Pat. No. 5,720,745), further in view of Schnitzler (2002/0016590 A1).

Regarding claims 4 and 5, as noted above, Gordon does not explicitly disclose welding the electrode or conductor to the flat body. Schnitzler teaches that it is well known to use point-wise resistance welding to attach an electrode/conductor to a flat body (paragraph 0018). It would have been obvious to one of ordinary skill in the art at the time the invention was made to strengthen the physical attachment between the electrode/conductor and the body using point-wise resistance welding to ensure that the electrode does not slide out from the fixing device.

5. **Claims 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Schnitzler (2002/0016590 A1), in view of Gordon et al. (US Pat. No. 5,320,621).

Regarding claim 9, Schnitzler teaches an instrument for plasma coagulation in Figs. 1 and 2 comprising a tubular probe body (20) with a tube wall (Fig. 1 cross-section) defining a lumen through which an inert gas is conducted through the probe body (paragraph 0027), an ignition electrode (portion of wire 30 distal to attachment point 31) located within the lumen in the region of an outlet defined by the probe body, a current conductor (portion of wire 30 proximal to attachment point 31) adapted to supply a coagulation current to the ignition electrode, and a fixing device (10) fixing the ignition electrode in a predetermined position within the probe body, and comprising a flat body with longitudinal edges (26) by means of which the flat body is attached to the tube wall such that the flat body extends substantially diametrically across the lumen (see paragraph 0026).

Schnitzler fails to teach that the ignition electrode is attached such that the ignition electrode extends further into the lumen in a direction of the outlet than the flat body of the fixing device, since the ignition electrode is also the flat body. However, one of ordinary skill in the art would appreciate keeping the flat body as a fixing means since it serves to minimize aerodynamic turbulence of the gas stream (§ 0027) and using an electrode that extends further into the lumen in a direction of the outlet than the fixing means as exemplified by Gordon. Gordon teaches a similar device where the ignition electrode extends further into the lumen in a direction of the outlet than the fixing device 22 (see Fig. 5 above).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the ignition electrode of Gordon such that it extends

Art Unit: 3739

further into the lumen in a direction of the outlet than the flat body of the fixing device of Schnitzler since one of ordinary skill in the art would appreciate keeping the flat body as a fixing means since it serves to minimize aerodynamic turbulence of the gas stream (Schnitzler, ¶ 0027) and since Gordon teaches the configuration where an electrode extends further into the lumen in a direction of the outlet than the flat body of the fixing device as exemplified by Gordon in order to center the electrode to achieve the best energy transfer and expose a maximum amount of the electrode to the flow of gas within the nozzle (Fig. 5, col. 1, lines 33-38).

Response to Arguments

Applicant's arguments filed on 6/10/09 have been fully considered but they are not persuasive.

Applicant argues that the added limitation where "the ignition electrode extends further into the lumen in a direction of said outlet than the flat body of the fixing device" is considered and addressed in the grounds of rejection to claim 9 above (using Schnitzler as the primary reference and Gordon as a secondary reference).

Applicant argues that neither Gordon nor Farin teach all of the limitations of claim 1. However, Gordon and Farin do teach the limitations of claim 1 as explained in the grounds of rejection above. Applicant argues that the portion of the clip that is flat does not "extend diametrically across said lumen" and that the portion only extends across less than half of the lumen. However, the flat body does "extend diametrically across

Art Unit: 3739

said lumen” as explained above. Note that claim 1 does not specify that the flat body extends diametrically across the entire lumen. Thus the claim does not preclude the possibility that the flat body portion has a gap in the center. Applicant further argues that the clip in Gordon is not a flat body and that a portion of it is flat. Note that claim 1 does not specify that the entire body is flat, and therefore the clip in Gordon may be broadly considered a flat body. Thus Farin is not necessary to teach the flat body since Gordon teaches the flat body.

Applicant argues that Schnitzler does not disclose neither an inner tubule near the outlet of the device, nor a flat body disposed to the other side of the inner tubule. However, Farin teaches the limitations as explained in the grounds of rejection in regards to claim 1 above. Applicant argues that Schnitzler does not teach that a tip of the ignition electrode extends further in to the lumen than the flat body of the fixing device. However, the primary reference Gordon teaches this limitation as explained in the grounds of rejection in regards to claim 1. Applicant argues that Schnitzler fails to teach the limitations of the flat body recited in claim 1. However, the primary reference Gordon teaches the limitation as explained above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN LEE whose telephone number is (571)270-1407. The examiner can normally be reached on M-F 9-5:30.

Art Unit: 3739

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571)-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Linda C Dvorak/
Supervisory Patent Examiner, Art
Unit 3739

/B. L./ 8/26/09
Examiner, Art Unit 3739